PHILIPS

Avalon Fetal Monitors Quick Guide

Avalon FM20/FM30/FM40/FM50 Rev. F.0 onwards

Watch the Training DVD!

Confirm fetal life by independent means before you start fetal monitoring. Continue to confirm that the fetus is the signal source for the fetal heart rate (FHR) during monitoring.

Touchscreen Operation with Menus

Control monitor functions (except switching on) by touching elements on the screen.

Main Screen – closes all open menus/ windows and returns to main screen.

Main Setup – gives access to all functions.

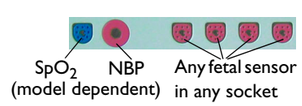
SmartKeys

SmartKeys provide fast access to functions such as starting/stopping the recorder, or resetting the Toco baseline. Use the scrolling key ▶▶ to access more SmartKeys.

Getting Started

1 Switch the monitor on.

2 Connect sensors or transducers. Push connectors **firmly** into sockets.



3 Apply transducers to the patient.

4 Measurements appear on the display.

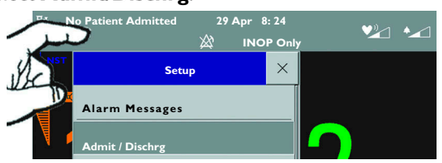
Signal Quality Indicators for FHR

Check signal quality indicators are full during monitoring, and reposition transducers as necessary.

Admitting a Patient

If you are using an OB TraceVue system, admit/discharge your patient there. Otherwise admit her via the **Patient Demographics** window on the monitor.

1 Touch the gray information line at the top of the screen then select **Admit/Dischrg**:



2 Touch the **Admit Patient** pop-up key.

3 Enter Last Name, using the on-screen keyboard, and press enter.

4 Repeat for First Name and MRN, then select **Confirm**.

Discharging a Patient

After monitoring, discharge the patient.

1 Open **Patient Demographics** window.

2 Touch the **Discharge Patient** pop-up key.

3 Select **Confirm**.

Loading Paper

1 If the recorder is on, stop it.

2 Open the paper drawer.

3 With the bottom side of the paper pack down (“STOP” appears on the final page), unfold the top page of the pack, and position the uterine activity scale on the right.

4 Put the pack into the tray.

5 Push the paper drawer back until it “clicks” closed.

Starting/Stopping the Recorder

Either Touch the **Start/Stop** SmartKey

Or

1 Touch the **recorder status icon.** The Fetal Recorder menu opens.

2 Select **Start/Stop**.

Recorder Status Icon States

Recorder On

Recorder Off

User-solvable problem (e.g. paper out)

Recorder defective (call service)

Touch the icon to enter the Fetal Recorder Menu.

Safeguarding Traces when the Paper Runs Out

Trace data for the period when the paper was out is stored in memory and printed out at high speed automatically when the recorder restarts.

Marking an Event on the Trace Paper

- Either select the **Set Marker** SmartKey
- Or press the button on the remote event marker.

Entering Notes

1 Press the **Enter Notes** SmartKey . **Enter Note** menu opens.

2 Pick a note (scroll if needed).

3 Select **Confirm**. The note appears in the display status line, and on the trace if the fetal recorder is on.

Tearing Off the Paper

1 Touch to stop the recorder.

2 For FM20/30: Select the Paper Advance SmartKey to advance paper to the next perforation.
Never pull paper by hand.

3 Tear off paper.

Changing the Fetal Heart Sound Volume

1 Touch the symbol.

2 Pick the required volume from the pop-up volume scale.

Selecting Fetal Heart Sound

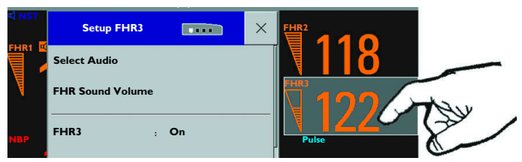
You can listen to the fetal heart sound from one ultrasound transducer at a time. You see the audio source symbol next to the FHR numeric label for the channel you are listening to: FHR2

1 Enter the **Setup FHR** menu for the channel you want to hear.

2 Press **Select Audio**. It may take a few seconds for the audio source symbol to appear.

Identifying Transducers

Touch a FHR numeric on the screen...



...and the bright, blue **Finder LED** lights up on the corresponding transducer monitoring that channel.

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Cross-Channel Verification (CCV)

CCV indicates when monitored heart rates (fetal or maternal) coincide, by displaying the symbol ? on the screen, and ? on the trace recording.

Check the trace and reposition one of the transducers if necessary using sound.

Separating Traces

To help you interpret traces with similar baselines:

1 Touch the recorder status icon.

2 Scroll down open menu and select **Trace Separation** to toggle between **On** or **Off**.

Resetting the Toco Baseline

Touch the **Toco Baseline** SmartKey to reset the Toco baseline to 20.

Zero IUP (FM30/50 only)

1 Enter the **Setup IUP** menu.

2 Touch **Zero IUP** (resets display and trace to 0).

While zeroing, the transducer should be level with the maternal xiphoid.

Selecting the IUP Scale (FM30/50 only)

1 Enter the **Setup IUP** menu.

2 Touch **IUP Scale** to switch between **mmHg** and **kPa**.

Setting Non-Stress Test Timer run time

1 Touch the gray information line at the top of the screen then select **NST Timer** from the menu.

2 Select **Run Time** and pick desired time from the pop-up list.

Changing the Alarm Volume

This **alarm volume indicator** at the top right of the monitor screen gives you an indication of the current alarm volume.

1 Touch **alarm volume indicator**.

2 Pick the required volume from the pop-up volume scale.

Changing Alarm Limits (Alarm Mode 'All')

1 Touch the measurement numeric to open the Setup Menu.

2 Touch the limit you want to change, and pick a new limit from the pop-up list.

Responding to Alarms

The monitor responds to three alarms levels:

Technical (INOP) Alarms: message in blue INOP field, INOP tone.

Examples: **FHR1 UNPLUGGED**

Yellow Alarms: message in yellow alarms field, medium priority audible alarm signal.

Examples: ****FHR1 94 110**

Red Alarms: red alarm messages on screen, high priority audible alarm signal.

Examples: *****EXTREME TACHY**

Touch **Silence** to acknowledge all active alarms by stopping audible alarm indicators.

Pause Alarms

Select **Pause Alarms** if you want to temporarily prevent alarms from sounding (pause duration is configurable to 1, 2 or 3 minutes, or infinite).

Alarms Off

If the pause duration is configured to infinite, this key is labeled **Alarms Off**.

The audible alarm indicators configured for your monitor depend on which alarm standard applies in your hospital.

Noninvasive Blood Pressure (NBP): Starting and Stopping Measurements

- *Either* touch the **NBP** numeric 120/80 to enter the **Setup NBP** menu, then pick the appropriate setting
- *Or* touch the appropriate SmartKey

Action	Setup Menu	SmartKey
Start/stop manual measurement	**Start/Stop**	
Start auto series		
Stop current auto measurement within series		
Stop auto/manual AND series measurements	**Stop All**	

NBP: Enabling Automatic Mode and Setting Repetition Time

In the **Setup NBP** menu:

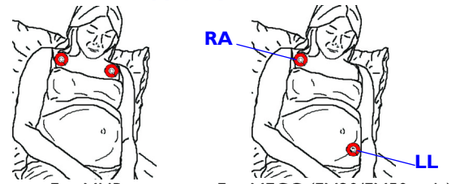
1 Select **Auto/Man** (toggle as necessary).

2 Select **Repetition Time** to set the interval between automatic NBP measurements.

Priority for Maternal Heart Rate (MHR) / Pulse Rate

When monitoring...	...source of HR/Pulse is:
MHR via MECG **and** SpO_2	MHR via MECG
SpO_2, but **not** MHR via MECG	Pulse from SpO_2
Neither MHR via MECG nor SpO_2	Averaged pulse from NBP (no alarms available)

MHR / MECG: Applying Electrodes



For MHR For MECG (FM30/FM50 only)

MECG: Printing the Waveform (FM30/50 only)

Separate: records a real-time six-second MECG strip in fast printout mode. This temporarily interrupts fetal trace recording while MECG strip prints.

Overlap: records a delayed six-second MECG snapshot on the fetal trace, without interrupting the fetal trace.

If you are also monitoring direct fetal ECG (DECG), the DECG waveform will be printed above the MECG waveform.

Turning Artifact Suppression (Arrhythmia Logic) On/Off (FM30/50 only)

1 Touch the DFHR numeric to enter the DFHR menu.

2 Select **ArtifactSuppress** to toggle between:

- **On** (artifacts are suppressed)
- **Off** (no artifact suppression, **use this setting if you suspect fetal arrhythmia**)

Obtaining Further Information

Full operating and safety information is contained in your monitor's Instructions for Use (IfU). Familiarize yourself with the IfU content before putting the monitor into use and beginning to monitor patients. This Quick Guide is in addition to, and does not replace, the IfU.

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